

DATE OUT:

SUBJECT: STORAGE STABILITY (830.6317) & CORROSION CHARACTERISTICS  
(830.6320) REVIEW  
ACCELERATED STUDY [ ]; ONE YEAR STUDY [ X ];  
OVER 1 YEAR STUDY [ ]  
MP [ ] EP [ X ] EUP [ ] ACTION CODE: 570  
DP BARCODE No.:355510 REG. No. 228-442  
DECISION No.398700 MRID No(s):474897-01  
PRODUCT NAME: ESCLADE2 HERBICIDE

COMPANY: NUFARM AMERICA INC.

FROM: William Herald *W Herald*  
Product Chemistry Team  
Technical Review Branch/RD (7505P)

*Sbm 07/21/09*

TO: Eugene Wilson /Joanne Miller, RM 23  
Herbicide Branch / RD (7505P)

I. CONCLUSIONS:

STORAGE STABILITY (830.6317):

[ X ] ACCEPTABLE  
[ ] UNACCEPTABLE\*  
[ ] UPGRADEABLE\*

40CFR158.190 DATA REQUIREMENT: [ X ] SATISFIED [ ] NOT SATISFIED

CORROSION CHARACTERISTICS (830.6320):

[ X ] ACCEPTABLE  
[ ] UNACCEPTABLE\*  
[ ] UPGRADEABLE\*

40CFR158.190 DATA REQUIREMENT: [ X ] SATISFIED [ ] NOT SATISFIED

## II. STUDY SUMMARY

### A. STUDY CONDUCTED UNDER US GLP/OECD GUIDELINES

☒ Yes

☐ No

### B. PRODUCT INFORMATION:

#### INGREDIENTS

##### Active ingredient(s):

##### Label claim(s) Nominal concentrations (%):

Dimethylamine Salt of 2Methyl-4-Chlorophenoxyacetic Acid..... 37.84%

1-Methylheptyl Ester of Fluroxypyr..... 4.45%

Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid.... 4.07%

##### Initial concentrations of the AIs (%) used in the study:

Dimethylamine Salt of 2Methyl-4-Chlorophenoxyacetic Acid..... 39.68%

1-Methylheptyl Ester of Fluroxypyr..... 4.60%

Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid.... 4.31%

##### Lower certified limits (%) based on AIs % in the study:

Dimethylamine Salt of 2Methyl-4-Chlorophenoxyacetic Acid..... 38.4896%

1-Methylheptyl Ester of Fluroxypyr..... 4.37%

Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid.... 4.1807%

### C. EXPERIMENTAL PARAMETERS

Temperature: Ambient laboratory temperatures ranging between 18°C to 24°C.

Duration of study: ☒ 1 year; ☐ over 1 year

Type of container: HDPE containers provided by the Sponsor.

Analysis at intervals: ☒ 0 (initial);

☒ 3 months; ☒ 6 months

☒ 9 months; ☒ 12 months

### D. ANALYTICAL METHOD

Method	DETECTOR
High Pressure Liquid chromatography (HPLC)	UV/VIS (245nm)

### E. RESULTS

1. Based on the initial AIs% presented in the study, during testing intervals of 3, 6, 9 and 12 months the concentrations of the three active ingredients remained within the statutory parameters required in Title 40 CFR § 158.350 while stored at ambient temperatures ranging between 18°C and 24°C.
2. There were no reported impurities.
3. No cracking, fogging, discoloration or distortion of the HDPE containers was observed. Throughout the course of the study there were no reported changes of the dark amber or gold, clear liquid test substance or the container. There were no reported adverse reactions involving the product with the HDPE containers. The mean percent total weight change observed in the test container was  $-0.13\% \pm 0.02\%$ . The report does not state that the container tested is the intended commercial container. Since no other container was tested for product stability and corrosion characteristics, the instant product is restricted to the container tested in the study for commercial purposes.
4. The report indicates that linearity, standard accuracy and precision were observed during testing.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OPPTS/OPP/RD/TRB/PRODUCT CHEMISTRY TEAM

WASHINGTON, D.C. 20460

DATE OUT: April 5, 2005

SUBJECT: Product Chemistry Review of Riverdale Escalade II  
Barcode #:315362 Decision #: 354561 Reg No: 228-UUE  
PC Code(s):128968,029801,030019 Food Use: NO

FROM: Linda L. Kutney, Chemist *Linda L. Kutney*  
Product Chemistry Team  
Technical Review Branch/RD (7505C) *4/5/05*

TO: Joanne Miller, Marcel Howard, RM-23  
Herbicide Branch/ RD (7505C)

*SLM*  
*4/05/05*

INTRODUCTION:

Nufarm Americas, Inc., has submitted product chemistry data to support registration and a new basic CSF (dated 2/23/05) for Riverdale Escalade II, Reg No: 228-UUE, having a label claim of 39.53% DMA Salt of 2,4-D, 5.90% 1-Methylheptyl Ester of Fluroxypr, and 4.10% Dicamba. There are no food uses proposed for this product. Data were submitted under MRID 46484801.

The registrant claims substantial similarity between the physical chemical properties of their product and the product having Reg No 228-417.

SUMMARY OF FINDINGS:

1. The storage and disposal statements on the label are acceptable.

TRB CONCLUSIONS:

We cannot grant the request for substantial similarity between the proposed product, Riverdale Escalade II, and the product having Reg No 228-417. The proposed new product has 5.90% 1-Methylheptyl Ester of Fluroxypr, which is below the lower certified limit for this ai. The cited product has a label claim of 11.82% 1-Methylheptyl Ester of Fluroxypr.

Subgroup A and B data requirements are acceptable except:

1. Storage Stability - 830.6317
2. Corrosion Characteristics - 830.6320

PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup A & Subgroup B)

Subgroup A, Data Guideline Requirement 830.--	<u>Data</u> <u>Satisfied?</u>	<u>MRID No.</u>
1550. Chemical Identity (CSF)	Yes	CSF
1600. Beginning Materials	Yes	46484801
1650. Formulation Process	Yes, Mixing only	46484801
1670. Discussion of Impurities	Yes, DMA present in the technicals may react with Nitrates to form the impurity N-N- Dimethyl Nitrosamine. This impurity has not been detected by the Registrant.	46484801
1750. Certified Limits (CSF)	Yes	CSF
1800 Enforcement Analytical Method	Yes, CHB-OP-MTH-126-P-1  HPLC	46484801

<u>Physical/Chemical Properties</u> <u>Subgroup B,</u> <u>Guideline 830.- Data Requirement:</u>	<u>Data Satisfied?</u>	<u>Description</u>	<u>MRID No.</u>
6302 Color	Yes	Amber	46484801
6303 Physical State	Yes	Liquid	46484801
6304 Odor	Yes	Mild Amine, ester	46484801
6314 Oxidation/Reduction	Yes	No oxidizing agents in formula.	46484801
6315 Flammability/Flame Extension	Yes	> 230 F	CSF
6316 Explodability	Yes	Not explosive.	46484801
6317 Storage Stability	NO	Cited 46070702	46484801
6319 Miscibility	Yes	NA. Not mixed with petroleum solvents.	46484801
6320 Corrosion Characteristics	NO	Cited 46070702	46484801
6321 Dielectric Breakdown Voltage	Yes	Not used around electrical equipment.	46484801
7000 pH	Yes	5.9	46484801
7100 Viscosity	Yes	51.6 cPs @ 25C	46484801
7300. Density/Bulk Density	Yes	1.169 g/ml @ 25C	46484801

Explanations: NA = Not Applicable





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION,  
PESTICIDES AND TOXIC SUBSTANCES  
Similarity Action

05/APR/2005

MEMORANDUM

Subject: Name of Pesticide Product: Riverdale Escalade II  
EPA Reg. No. /File Symbol: 228-UUE  
DP Barcode: D315357  
Decision No: 354561  
PC Codes: 030019, 128968, 029801

From: Masih Hashim, Toxicologist  
Technical Review Branch  
Registration Division (7505C)

*MSH*  
*> 12*

To: Marcel Howard, PM Team 23  
Herbicide Branch  
Registration Division (7505C)

Applicant: Nufarm Americas Inc.  
Burr Ridge, Illinois 60527-0866

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid	39.53
1-Methylheptyl Ester of Fluroxypyr	5.90
Dicamba	4.10
<u>Inert Ingredient(s):</u>	<u>50.47</u>
Total:	100.00

**ACTION REQUESTED:** RM requests a similarity action between the proposed (#228-UUE) and the cited (#228-417) products.

**RECOMMENDATIONS:** The cited and the proposed products are substantially similar. TRB has no objection to bridging data between them.

The acute toxicity profile for File Symbol 228-UUE is as follows:

acute oral toxicity	III	cited-acceptable	MRID 46070703
acute dermal toxicity	III	cited-acceptable	MRID 46070704
acute inhalation toxicity	IV	cited-acceptable	MRID 46070705
primary eye irritation	II	cited-acceptable	MRID 46070706
primary skin irritation	III	cited-acceptable	MRID 46070707
dermal sensitization	Negative	cited-acceptable	MRID 46070708

**LABELING:** Following are the precautionary and first aid statements for this product.

**PRODUCT ID #:** 000228-442

**PRODUCT NAME:** Riverdale Escalade II

### **PRECAUTIONARY STATEMENTS**

#### **Hazards to Humans and Domestic Animals:**

**SIGNAL WORD:** WARNING

Causes substantial but temporary eye injury. Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

#### **First Aid:**

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.